

In order to define an area considered for the economic values at risk, the study utilized a 30-year risk area developed by the Science Panel in their deliberations of Inlet Hazard Areas. The purpose was to provide a designation of risk that is approximately equal to the level of risk indicated by the setbacks in the adjacent oceanfront areas. The study found that the economic values within the 30 year risk areas for developed shorelines varies from about \$27 million at Ocean Isle to over \$320 million at Bald Head Island. The study further refined the economic value at current or imminent risk (as defined by the presence of sandbags for temporary protection) for developed shorelines from just under \$3 million at North Topsail Beach to about \$26 million at the north end of Figure Eight Island. It must be noted that a single terminal groin could not protect all properties identified as being “at risk” near any given inlet; a terminal groin on one side of an inlet will only stabilize the shoreline on that side of the inlet.

It is difficult to draw conclusions on the effects associated with a terminal groin on an unmanaged inlet since all of the structures considered for this study were located at inlets adjacent to navigable, dredged channels. It can be said that the structure will alter the natural inlet processes of a specific inlet. In what manner and to what degree can only be determined through specific study of the geologic setting, sediment budgets and hydrodynamics of the individual inlet.

RECOMMENDATIONS

Under Article 14, Section 5 of the North Carolina Constitution, it is the policy of the State to conserve and protect its lands and waters for the benefit of all its citizenry, and to preserve as a part of the common heritage of this State its forests, wetlands, estuaries, beaches, historical sites, open lands, and places of beauty. In G.S. 113A-102(b), the General Assembly identified one of the goals of the Coastal Area Management Act as follows:

- (1) To provide a management system capable of preserving and managing the natural ecological conditions of the estuarine system, the barrier dune system, and the beaches, so as to safeguard and perpetuate their natural productivity and their biological, economic and esthetic values.

CAMA also specifically directed the Commission to develop standards capable of protecting the natural resources of the coastal area, including fish and wildlife, and maintaining public trust rights. CAMA recognized that the Commission would also need to consider economic development and impacts to private property.

As permanent erosion control structures may cause significant adverse impacts on the value and enjoyment of adjacent properties, the Commission has relied on nonstructural approaches to coastal hazard mitigation. Those methods include:

- development standards for the ocean and inlet hazard areas, including building setbacks;
- land use planning and land classification ;